## ABSTRACT

An apparatus for processing auscultation signals, e.g. embedded in an electronic stethoscope with a digital readout of an estimated heart rate. The apparatus comprises a bias processor for receiving an auscultation signal and providing a biased auscultation signal; said bias processor comprising an envelope detector and an estimator for calculating a signal representative of the beat frequency of the auscultation signal. In one aspect the information in the biased auscultation signal that is in conformity with the repeated information in the auscultation signal is enhanced. This may e.g. be done by calculating the conformity between the biased auscultation and at least a part of the biased auscultation signal. In another aspect of the invention the auscultation

signal is biased by means of A-weighing. Preferably the

two aspects of the invention are combined.

Fig. 4 should be published.